

EPIDEMIOLOGICAL ANALYSIS OF VIRAL PNEUMONIAE IN 1986-1990

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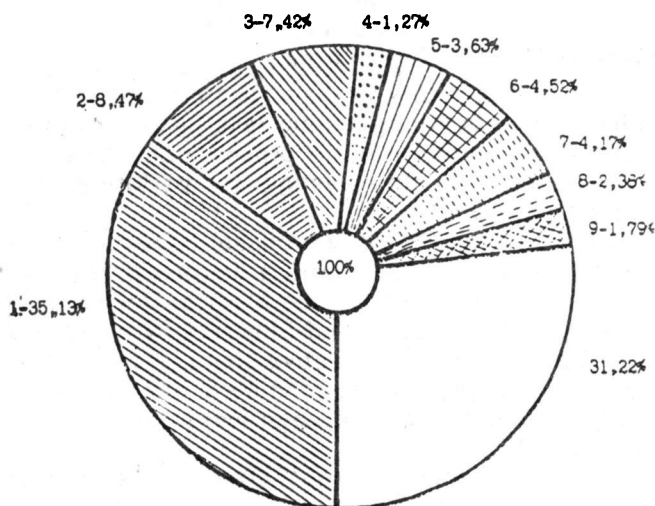
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Decoding of respiratory viral and bacterial infections, pneumoniae included, presents a long-lasting task of the scientists from the Department of Microbiology. In the present communication we demonstrate the results from our investigations performed during the recent 5 years (1986-1990).

We examined a total of 826 double serum samples from patients aged between 20 and 60 years with a diagnosis of pneumonia and hospitalized in various Clinics of the Medical University of Varna as well as in hospitals in Dobrich and Shumen. By using of serological methods (RCB and RIHA) the relative share of different viral agents in the etiology of pneumonia was estimated. Results were considered positive when antibody titre had been increased at least fourfold in the second samples.

Our data are presented on fig. 1. One can see the distribution of serologically proved pneumoniae during this period. It has to be noted that in 1986, viral etiology is established in 72,25 % of pneumonia cases, in 1987 - in 52,95 %, in 1988 - in 70,82 %, in 1989 - in 77,22 %, and in 1990 - in 70,67 % of the cases. In 1986, influenza, adeno- and RS-viruses possess the greatest relative share among serologically proved viral agents of pneumoniae. The relatively high percentage of REO-virus pneumoniae stresses, indeed. They are followed by parainfluenza and C. burnetti. Corona viruses come last. In 1987, there is a slightly expressed reduction of influenza pneumoniae (19,55 %) but an increase of Mycoplasma pneumoniae ones (5,58%). Next come parainfluenza and REO-viruses. In 1988 and 1989, influenza virus pneumoniae prevail again followed by parainfluenza and Mycoplasma pneumoniae while the number of cases with REO-virus ones remains the same. In 1990, influenza pneumoniae are followed by RS-virus and adenovirus ones while the percentage of parainfluenza pneumoniae is lower (2,85 %) than that in previous three years. It is evident that viral etiology is proved in 68,78 % of the cases with pneumonia. As a whole, influenza viruses, type A and type B, occupy a leading position followed by adenoviruses and RS-viruses. The high percentage of influenza pneumoniae in 1986 and 1990 correlates with epidemiological data about the higher morbidity

rate of acute respiratory diseases and the isolated influenza viruses type A (H3N2).



| LEGEND: | | |
|----------------------|--------------------------|------------------|
| 1. influenza viruses | 4. corona viruses | 7. M. pneumoniae |
| 2. adenoviruses | 5. RCO-viruses | 8. C. burnetti |
| 3. RS-viruses | 6. parainfluenza viruses | 9. Chl. psittaci |

Fig. 1. Relative share of etiological factors of pneumoniae for the period 1986-1990

We, therefore, could assume that post-influenza pneumoniae could be concerned in these cases. We can conclude that viruses have played an important etiological role in pneumoniae during 1986-1990 in the region of Varna, Dobrich and Shumen. First have come influenza, adeno- and RS-viruses but last - Corona viruses and Chl. psittaci.